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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/318,692	05/25/1999	SUBAN G. KRISHNAMOORTHY	PD98-2385	1777

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EXAMINER

CHOUDHARY, ANITA

ART UNIT	PAPER NUMBER
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2153

DATE MAILED: 01/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/318,692

Applicant(s)

KRISHNAMOORTHY ET AL.

Examiner

Anita Choudhary

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 35-44 and 50-54 is/are rejected.
- 7) ☒ Claim(s) 45-49 and 55 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 November 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

The affidavit filed on October 5, 2004 under 37 CFR 1.131 is sufficient to overcome the Ohara et al. (US 6,438,643 and US 6,694,376) and Hayes Jr. et al. (US 6,105,066) references.

The amendment filed on August 16, 2004 has been entered.

Claims 35-55 are presented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 35-44 and 50-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goffinet et al (US 6,112,256) in view of Onaga (US 5,862,404) in further view of Pope (US 5,596,738).

Goffinet shows a method for configuring the physical setup of multiple network devices (e.g. printers) from a host computer. A bi-directional communications link is provided in order to perform setup of multiple printers connected to the network. The host computer is capable of reading and setting up current printer configurations using configuration files retrieved from host computer memory (see abstract). Goffinet shows:

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- receiving, from a user, a second list of storage devices (printer) selected from the first list of storage devices (fig. 6, 140, col. 14 lines 43-63 and fig. 8 col. 20 lines 33-51);
- validating at least one storage device on the second list of storage devices (col. 15 lines 6-20);
- transferring a setup file to at least one agent (Quick Setup Send procedure) on the server (col. 14 lines 45-50); and
- instructing the at least one agent to download the configuration file to the at least one storage device (printer) (col. 14 line 54- col. 15 line 5).

Although Goffinet shows substantial features for configuring storage devices, Goffinet fails to specifically point out a client server system for obtaining a listing of storage device.

Nonetheless this feature is well known in the art, and would have been an obvious modification to the system disclosed by Goffinet, as evidenced by Onaga.

In an analogous art, Onaga shows a network device discovery system for obtaining status information for network peripheral devices via a client/server system (see abstract). A file server (120) storing network status information for network peripheral devices (110) is situated in a central location, wherein client workstations contact the file server in order to receive status information for the peripheral devices. Information is presented in a series of lists including a "jobs file list," "device status file," and a "device list file" (col. 4 lines 41-65). Furthermore, a control unit (140) also functions as a server to provide appropriate peripheral services to the workstations and file servers on the network (col. 4 lines 4-7).

Given this feature, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system shown by Goffinet to employ the feature

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shown by Onaga in order to perform discovery and access network devices from a central location so that workstations on a network can more rapidly obtain information concerning status of peripheral devices without interfering with performance of the peripheral device (see Onaga, col. 2 lines 5-25).

Although the combined teachings of Goffinet and Onaga show substantial features of the claimed invention, including discovering and updating configuration files, as discussed above, they do not explicitly show updating firmware file. Nonetheless, this feature is well known in the art and would have been an obvious modification to the system shown by Pope.

In an analogous art, Pope discloses a peripheral device control system for changing firmware in a flash memory of a peripheral device, including printer, modems, disk drives and tape drives (col. 1 lines 20-25). Firmware can be downloaded into any of the above devices (col. 4 lines 1-11). The devices can be configured and reconfigured with firmware changes in the flash memory using a BOOT code executed from the devices RAM area (col. 4 lines 61- col. 5 line 4).

Given this feature, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system shown by Goffinet and Onaga to employ the feature shown by Pope in order to update overall hardware functionality of devices to keep up with interface specification changes or the correct manufacturing errors (col. 1 lines 24-35).

In referring to claim 36, Ohara shows querying the user for a password, receiving, in response to the query, a password from the user; and comparing the password to a password stored in a header of the firmware file to validate the user (col. 5 lines 23-25 and 35-42).

In referring to claim 37, Goffinet shows receiving, from a user, a second list of storage devices selected from the first list of storage devices comprises displaying the first list of storage devices to the user in a user interface that enables the user to select at least one storage device from the first list of storage devices (fig. 9).

In referring to claim 38, Goffinet shows validating at least one storage device on the second list of storage devices comprises comparing an inquiry string from the firmware file with an inquiry string from a firmware file resident on a storage device on the second list of storage devices (col. 13 lines 48-57).

In referring to claim 39, Goffinet shows validating at least one storage device on the second list of storage devices comprises determining whether the at least one storage device is capable of implementing a firmware update (col. 15 lines 5-16).

In referring to claim 40, Goffinet shows validating at least one storage device on the second list of storage devices comprises storing a device identifier associated with a validated device in a data field in the firmware file (col. 7 lines 15- col. 8 line 5).

In referring to claim 41, Goffinet shows removing from the second list of storage devices a storage device that cannot be validated (col. 16 lines 49-52).

In referring to claim 42, Goffinet shows removing from the second list of storage devices a storage device that cannot be updated (col. 16 lines 15-25).

In referring to claim 43, Goffinet shows transferring a setup file to at least one agent on the server comprises transferring a setup file that includes instructions for downloading the setup file from the agent to the storage device (col. 5 lines 1-5).

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In referring to claim 44, Goffinet, as discussed above (see rejection for claim 35), shows:
receiving from the client a second list of storage devices (printers) including at least one storage device from the first list of storage devices, a setup file, and an instruction to download the setup file to at least one storage device on the second list of storage devices (Quick setup Send, col. 14 lines 43-63, fig. 8 col. 20 lines 33-51); and

initiating a process to download the firmware file to the at least one storage device on the second list of storage devices (col. 14 lines 64- col. 15 line 5).

Although Goffinet shows substantial features for configuring storage devices, Goffinet fails to specifically point out a client server system for requesting and obtaining a listing of storage device. Nonetheless this feature is well known in the art, and would have been an obvious modification to the system disclosed by Goffinet, as evidenced by Onaga.

In an analogous art, Onaga shows a network device discovery system for obtaining status information for network peripheral devices via a client/server system (see abstract). A file server (120) storing network status information for network peripheral devices (110) is situated in a central location, wherein client workstations contact the file server in order to receive status information for the peripheral devices. Information is presented in a series of lists including a "jobs file list," "device status file," and a "device list file" (col. 4 lines 41-65). Furthermore, a control unit (140) also functions as a server to provide appropriate peripheral services to the workstations and file servers on the network (col. 4 lines 4-7). Onaga shows:

Receiving at a server, a request from a client to access one or more storage devices in the computer system (col. 5 lines 63- col. 6 line 12);

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Transmitting from the server to the client a first list of storage devices visible to the server (col. 6 lines 4-17).

Given this feature, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system shown by Goffinet to employ the feature shown by Onaga in order to perform discovery and access network devices from a central location so that workstations on a network can more rapidly obtain information concerning status of peripheral devices without interfering with performance of the peripheral device (see Onaga, col. 2 lines 5-25).

Although the combined teachings of Goffinet and Onaga show substantial features of the claimed invention, including discovering and updating configuration files, as discussed above, they do not explicitly show updating firmware file. Nonetheless, this feature is well known in the art and would have been an obvious modification to the system shown by Pope.

In an analogous art, Pope discloses a peripheral device control system for changing firmware in a flash memory of a peripheral device, including printer, modems, disk drives and tape drives (col. 1 lines 20-25). Firmware can be downloaded into any of the above devices (col. 4 lines 1-11). The devices can be configured and reconfigured with firmware changes in the flash memory using a BOOT code executed from the devices RAM area (col. 4 lines 61- col. 5 line 4).

Given this feature, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system shown by Goffinet and Onaga to employ the feature shown by Pope in order to update overall hardware functionality of devices to keep up with interface specification changes or the correct manufacturing errors (col. 1 lines 24-35).

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In referring to claim 50, Goffinet shows retrieving, from the received setup file, a series of commands for downloading the setup file to a storage device; and executing the series of commands (set OM variable OM variables, col. 15 lines 5-49).

In referring to claim 51, Goffinet shows downloading the firmware file in fixed-length increments contemporaneously to multiple storage devices (col. 15 lines 66- col. 16 lines 7).

In referring to claim 52, Pope shows locking the storage device during the firmware downloading process (col. 3 lines 60-63).

In referring to claim 53, Goffinet shows verifying the firmware download (col. 15 lines 5-16).

In referring to claim 54, Goffinet shows retrieving a data field from the firmware file downloaded to the at least one storage device; and comparing the retrieved data field to a corresponding data field in the firmware file received from the client (col. 13 lines 48-57).

Allowable Subject Matter

Claims 45-49 and 55 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

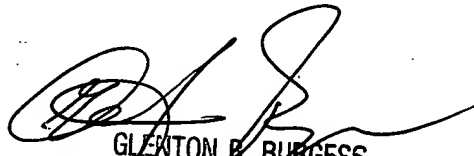
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anita Choudhary whose telephone number is (703) 305-5268. The examiner can normally be reached on 9am-5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703) 305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anita Choudhary
December 23, 2004



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